REMARKS

The Office Action mailed July 1, 2003, has been received and reviewed. Claims 1 through 16, and 24 through 37 are currently pending in the application. Claims 1 through 16, and 24 through 37 stand rejected. Claims 17 through 23 have previously been canceled. Applicants have amended claims 1, 9 and 24, and respectfully request reconsideration of the application as amended herein.

35 U.S.C. § 102(b) Anticipation Rejections

Anticipation Rejection Based on U.S. Patent No. 5,182,641 to Diner et al.

Claims 1 through 4, 6 through 16, 24 through 34, 36 and 37 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Diner et al. (U.S. Patent No. 5,182,641). Applicants respectfully traverse this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Independent Claim 1

Regarding claim 1 and claims 2 through 8 and 37 depending therefrom, Diner discloses a "television system for viewing a workspace using at least one monitor and one or more cameras and perhaps lighting elements." (Col. 1, lines 65-67.) Diner specifically discloses and as characterized in the Office Action's Response to Arguments citations, (i) "That transformation of hand-controller coordinates to selected televisions camera coordinates is conventional" (col. 5, lines 16-18); (ii) "If the hand-controller coordinates are transformed to correspond with the coordinates of a selected camera, the graphics will indicate that fact" (col. 2, lines 40-42); and (iii) "the operator assigns the monitors to up to four of the five cameras and changes these assignments as the need arises" (col. 5, lines 35-37).

Diner does not appear to disclose, as claimed by Applicants in amended independent claim 1,

A telepresence system for allowing an operator to interact with a remote operating environment, the system comprising:

one or more input devices, wherein the one or more **input devices produce raw data** representative of operator commands;

an input conversion module for **converting the raw data into a zone structure wherein the zone structure represents the operator commands in a telepresence-device independent format**;

one or more device modules corresponding to one or more telepresence devices, the one or more device modules for **converting the zone structure into telepresence device commands** specific to an associated one of the one or more telepresence devices, **the zone structure being a format independent of any of the one or more telepresence devices**, the telepresence device commands resulting from at least a portion of the operator commands; and

a configuration module for associating a specific one of the one or more input devices corresponding to the zone structure with a specific one of the one or more telepresence devices which responds to the telepresence device commands resulting from the zone structure. (Emphasis added.)

Diner does not disclose any intermediate telepresence device-independent format but rather discloses a direct scaling of coordinates commensurate with the corresponding field of view (e.g., zoom magnitude) of the selected camera. Specifically from Diner, "hand-controller **coordinates** are **transformed to correspond** with the coordinates of a **selected** camera" (col. 2, lines 40-42; emphasis added). In direct contradiction, Applicants' invention as claimed is drawn to, among other things, "**converting the raw data into a zone structure** wherein the **zone structure represents the operator commands in a telepresence-device independent format**".

Clearly, the Diner reference does not and cannot anticipate under 35 U.S.C. § 102(b) as no intermediate data formatting **transformation** process is disclosed. Accordingly, amended independent claim 1 and claims 2 through 8 and 37 depending therefrom, are allowable over the cited reference and the rejection should be withdrawn.

Independent Claim 9

Regarding claim 9 and claims 10 through 16 depending therefrom, Applicants reiterate that Diner discloses a "television system for viewing a workspace using at least one monitor and one or more cameras and perhaps lighting elements." (Col. 1, lines 65-67.) Diner specifically

discloses in the Office Action's Response to Arguments citations, (i) "That transformation of hand-controller coordinates to selected televisions camera coordinates is conventional" (col. 5, lines 16-18); (ii) "If the hand-controller coordinates are transformed to correspond with the coordinates of a selected camera, the graphics will indicate that fact" (col. 2, lines 40-42); and (iii) "the operator assigns the monitors to up to four of the five cameras and changes these assignments as the need arises" (col. 5, lines 35-37).

Diner does not appear to disclose, as claimed by Applicants in amended independent claim 9,

> In a system having input devices and telepresence devices, a method for controlling one or more associated telepresence devices with a selected input device, the method comprising the steps of:
>
> **receiving raw data** representative of movement commands from the selected input device;
>
> **converting the raw data into a zone structure**, wherein the zone structure represents the movement commands **in a telepresence-device independent format**, the **zone structure being a format independent of any of the one or more associated telepresence devices**;
>
> when the selected input device is selectively associated with the one or more associated telepresence devices, processing the zone structure with a device module corresponding to each of the one or more associated telepresence devices to obtain telepresence device commands corresponding to at least a portion of the movement commands for each of the associated telepresence devices; and
>
> transmitting the movement commands to the associated telepresence devices. (Emphasis added.)

Applicants herein sustain the above-recited arguments, namely, that Diner does not disclose <u>any</u> intermediate telepresence device-independent format but rather discloses a <u>direct scaling</u> of coordinates commensurate with the corresponding field of view (e.g., zoom magnitude) of the selected camera. Specifically from Diner, "hand-controller **coordinates** are **transformed to correspond** with the coordinates of a **selected** camera" (col. 2, lines 40-42; emphasis added). In direct contradiction, Applicants' invention as claimed is drawn to, among other things, "**converting the raw data into a zone structure,** wherein the **zone structure represents the movement commands in a telepresence-device independent format, the zone structure being a format independent of any of the one or more associated telepresence**

devices".

Clearly, the Diner reference does not and cannot anticipate under 35 U.S.C. § 102(b) as no intermediate data formatting **transformation** process is disclosed. Accordingly, amended independent claim 9 and claims 10 through 16 depending therefrom, are allowable over the cited reference and the rejection should be withdrawn.

Independent Claim 24

Regarding claim 24 and claims 25 through 36 depending therefrom, Applicants reiterate that Diner discloses a "television system for viewing a workspace using at least one monitor and one or more cameras and perhaps lighting elements." (Col. 1, lines 65-67.) Diner specifically discloses in the Office Action's Response to Arguments citations, (i) "That transformation of hand-controller coordinates to selected televisions camera coordinates is conventional" (col. 5, lines 16-18); (ii) "If the hand-controller coordinates are transformed to correspond with the coordinates of a selected camera, the graphics will indicate that fact" (col. 2, lines 40-42); and (iii) "the operator assigns the monitors to up to four of the five cameras and changes these assignments as the need arises" (col. 5, lines 35-37).

Diner does not appear to disclose, as claimed by Applicants in amended independent claim 24,

> A telepresence system for allowing an operator to interact with a remote operating environment, the telepresence system comprising:
>
> a plurality of input devices;
>
> a plurality of telepresence devices, wherein one or more of the telepresence devices is configured to be controlled by one of the plurality of input devices and one or more of the telepresence devices is configured to provide a visual representation of the operating environment;
>
> a computer comprising:
>
> an input conversion module for **receiving raw data** representative of operator commands from at least one of the plurality of input devices and **converting the raw data to a zone structure wherein the zone structure represents the operator commands in a telepresence-device independent format, the zone structure being a format independent of any of the plurality of telepresence devices**; and
>
> a plurality of device modules corresponding to the plurality of telepresence devices, wherein the device modules receive the zone

> structure and convert the zone structure to movement commands corresponding to the operator commands for each respective telepresence device; and
>
> a communication link for transmitting the movement commands to the telepresence devices. (Emphasis added.)

Applicants herein sustain the above-recited arguments, namely, that Diner does not disclose any intermediate telepresence device-independent format but rather discloses a direct scaling of coordinates commensurate with the corresponding field of view (e.g., zoom magnitude) of the selected camera. Specifically from Diner, "hand-controller **coordinates** are **transformed to correspond** with the coordinates of a **selected** camera" (col. 2, lines 40-42; emphasis added). In direct contradiction, Applicants' invention as claimed is drawn to, among other things, "**converting the raw data to a zone structure** wherein the **zone structure represents the operator commands in a telepresence-device independent format, the zone structure being a format independent of any of the plurality of telepresence devices**".

Clearly, the Diner reference does not and cannot anticipate under 35 U.S.C. § 102(b) as no intermediate data formatting **transformation** process is disclosed. Accordingly, amended independent claim 24 and claims 25 through 36 depending therefrom, are allowable over the cited reference and the rejection should be withdrawn.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent No. 5,182,641 to Diner et al.

Claims 5 and 35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Diner et al.(U.S. Patent No. 5,182,641). Applicants respectfully traverse this rejection, as hereinafter set forth.

> M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:
>
> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or**

> **references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

The 35 U.S.C. § 103(a) obviousness rejections of claims 5 and 35 are improper because the elements of the prima facie case of obviousness are not met. Specifically, the rejection fails to meet the criterion that the prior art reference must teach or suggest all the claim limitations.

Regarding claim 5 which indirectly depends from amended independent claim 1, Applicants reiterate that Diner discloses a "television system for viewing a workspace using at least one monitor and one or more cameras and perhaps lighting elements." (Col. 1, lines 65-67.) Diner specifically discloses in the Office Action's Response to Arguments citations, (i) "That transformation of hand-controller coordinates to selected televisions camera coordinates is conventional" (col. 5, lines 16-18); (ii) "If the hand-controller coordinates are transformed to correspond with the coordinates of a selected camera, the graphics will indicate that fact" (col. 2, lines 40-42); and (iii) "the operator assigns the monitors to up to four of the five cameras and changes these assignments as the need arises" (col. 5, lines 35-37).

Diner does not appear to disclose, as claimed by Applicants in amended independent claim 1 from which claim 5 depends through claim 37,

> A telepresence system for allowing an operator to interact with a remote operating environment, the system comprising:
>
> one or more input devices, wherein the one or more **input devices produce raw data** representative of operator commands;
>
> an input conversion module for **converting the raw data into a zone structure wherein the zone structure represents the operator commands in a telepresence-device independent format**;
>
> one or more device modules corresponding to one or more telepresence devices, the one or more device modules for **converting the zone structure into telepresence device commands** specific to an associated one of the one or more telepresence devices, **the zone structure being a format independent of any of the one or more telepresence devices**, the telepresence device commands resulting from at least a portion of the operator commands; and

> a configuration module for associating a specific one of the one or more input devices corresponding to the zone structure with a specific one of the one or more telepresence devices which responds to the telepresence device commands resulting from the zone structure.(Emphasis added.)

Applicants herein sustain the above-recited arguments, namely, that Diner does not disclose any intermediate telepresence device-independent format but rather discloses a direct scaling of coordinates commensurate with the corresponding field of view (e.g., zoom magnitude) of the selected camera. Specifically from Diner, "hand-controller **coordinates** are **transformed to correspond** with the coordinates of a **selected** camera" (col. 2, lines 40-42; emphasis added). In direct contradiction, Applicants' invention as claimed is drawn to, among other things, "**converting the raw data into a zone structure** wherein the **zone structure represents the operator commands in a telepresence-device independent format**". Therefore, Applicants respectfully request that the rejection to claim 5 be withdrawn.

Regarding claim 35 which depends from amended independent claim 24, Applicants reiterate that Diner discloses a "television system for viewing a workspace using at least one monitor and one or more cameras and perhaps lighting elements." (Col. 1, lines 65-67.) Diner specifically discloses in the Office Action's Response to Arguments citations, (i) "That transformation of hand-controller coordinates to selected televisions camera coordinates is conventional" (col. 5, lines 16-18); (ii) "If the hand-controller coordinates are transformed to correspond with the coordinates of a selected camera, the graphics will indicate that fact" (col. 2, lines 40-42); and (iii) "the operator assigns the monitors to up to four of the five cameras and changes these assignments as the need arises" (col. 5, lines 35-37).

Diner does not appear to disclose, as claimed by Applicants in amended independent claim 24 from which claim 35 depends,

> A telepresence system for allowing an operator to interact with a remote operating environment, the telepresence system comprising:
>
> a plurality of input devices;
>
> a plurality of telepresence devices, wherein one or more of the telepresence devices is configured to be controlled by one of the plurality of input

devices and one or more of the telepresence devices is configured to provide a visual representation of the operating environment;

a computer comprising:

an input conversion module for **receiving raw data** representative of operator commands from at least one of the plurality of input devices and **converting the raw data to a zone structure wherein the zone structure represents the operator commands in a telepresence-device independent format, the zone structure being a format independent of any of the plurality of telepresence devices**; and

a plurality of device modules corresponding to the plurality of telepresence devices, wherein the device modules receive the zone structure and convert the zone structure to movement commands corresponding to the operator commands for each respective telepresence device; and

a communication link for transmitting the movement commands to the telepresence devices. (Emphasis added.)

Applicants herein sustain the above-recited arguments, namely, that Diner does not disclose any intermediate telepresence device-independent format but rather discloses a direct scaling of coordinates commensurate with the corresponding field of view (e.g., zoom magnitude) of the selected camera. Specifically from Diner, "hand-controller **coordinates** are **transformed to correspond** with the coordinates of a **selected** camera" (col. 2, lines 40-42; emphasis added). In direct contradiction, Applicants' invention as claimed is drawn to, among other things, "**converting the raw data to a zone structure** wherein the **zone structure represents the operator commands in a telepresence-device independent format, the zone structure being a format independent of any of the plurality of telepresence devices**". Therefore, Applicants respectfully request that the rejection to claim 35 be withdrawn.

ENTRY OF AMENDMENTS

The amendments to claims 1, 9 and 24 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application. Further, the amendments do not raise new issues or require a further search.

CONCLUSION

Claims 1 through 16 and 24 through 37 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicants' undersigned attorney.

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